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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/789,236

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Luther Trawick

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EXAMINER

CHHABRA, ARUN S

ART UNIT

PAPER NUMBER

3764

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

01/22/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/789,236

Applicant(s)

TRAWICK ET AL.

Examiner

Arun S. Chhabra

Art Unit

3764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-19 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>7/22/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 6-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson (US Patent Number 4,819,934) in view of Genin (US Patent Number 3,888,023).

Wilson in Figures 1-5 shows a sparring partner with a head, arms, torso and a base providing a steady platform. Wilson in column 1, line 48 – column 2, line 52, discloses a means for raising, extending, retracting, straightening and bending the arm that includes a motor and also discloses structural components of the torso made from a high molecular weight polyethylene. Since the device of Wilson can throw a left punch and a right punch, the device of Wilson can throw a variety of punches. The torso also includes an electric motor, reference number 20, for movement of the arms. In column 3, line 67 – column 4, line 45, Wilson discloses a means for tilting and twisting the torso and describes a foam (polystyrene) covering for the electromechanical sparring partner.

Genin discloses an electromechanical sparring partner having a base with legs, reference numbers 11 and 12, a torso and torso movement assembly, reference numbers 14 and 16, a right and left arm, 15 and a controller on the front face of housing 12 using batteries as a power source.

Genin also teaches that it is known to use any from a group of linear actuators, drive modules and motors as set forth in claims 1-3 and in column 3, lines 10-67 and column 6, lines 24-60, to provide a means for twisting and tilting the torso in a side-to-side and front-to-back direction.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Automated Boxing Machine as taught by Wilson, with a torso movement assembly as taught by Genin, since such a modification would provide the robot with a torso movement assembly for twisting and tilting.

Claims 3, 4 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson in view of Genin as applied to claim 1 above and further in view of Huang et al. (US Patent Number 6,871,115).

Wilson and Genin disclose the claimed invention except for the three motors used for tilting and twisting the torso. Rather, Genin discloses only one motor that is able to tilt and twist the torso about multiple axes. Huang teaches that it is known to use three different motors as set forth in column 3, lines 16 - 25 to provide rotation or movement about three different axes. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Physical Training Robot as taught by Wilson and Genin, with three motors instead of one for torso movement as taught by Huang, since such a modification would provide the Automated Boxing Machine with three motors for providing tilting movement and twisting rotation about three different axes.

In regards to claim 4, Genin, in Figure 2 and column 5, lines 28-48 shows rocker and tie rod linkages connected to motors and shafts for moving the torso of the Physical Training Robot.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Genin and Wilson in view of Huang as applied to claims 3 and 4 above, and further in view of Wakaizumi et al. (US Patent Number 6,324,444).

Genin, Wilson and Huang disclose the claimed invention except for the ball joints at the end of the tie rod linkages. Wakaizumi teaches that it is known to use ball joints as set forth in column 2, lines 38-55 to provide for the smooth rotation of a shaft. Since the rod linkages in the applicant's invention need to be rotated, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the robot as taught by Genin and Wilson in view of Huang, with ball joints to connect the rod linkages as taught by Wakaizumi, since such a modification would provide the robot with ball joints for providing smooth rotation for the rod linkages about an axis.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson in view of Genin as applied to claim 14 above and further in view of Paoletti (US Patent Number 4,995,610).

Genin and Wilson disclose the claimed invention except for the solenoid. Paoletti teaches that it is known to use a solenoid along with two motors as set forth in column 4, line 40-65 as a way of swinging the arm and engaging in punching movements. It would have been obvious to one having ordinary skill in the art at the time the invention

was made to modify the Automated Boxing Machine as taught by Genin and Wilson, with solenoids as taught by Paoletti, since such a modification would provide the Automated Boxing Machine with solenoids and motors for enabling the machine to punch, swing, extend, retract and raise its arms.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson in view of Genin as applied to claim 14 above and further in view of Wilde (US Patent Number 5,100,138).

Genin and Wilson disclose the claimed invention except for the sensor. Wilde teaches that it is known to use a sensor or sensing means as set forth in claims 5-7 and in column 2, lines 34-42 to provide a way of detecting if another fighter is nearby and consequently responding to it. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Automated Boxing Machine as taught by Genin and Wilson, with a sensor as taught by Wilde, since such a modification would provide the Automated Boxing Machine with a sensor allowing for a method of detection of an opponent and a subsequent response by the machine.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson in view Genin as applied to claim 14 above and further in view of Franey (US Patent Number 5,803,877).

Genin and Wilson disclose the claimed invention except for the sensor. Franey teaches that it is known to use a sensor as set forth in column 7, lines 30-36 to provide a way of detecting the force and frequency of a punch. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the

Automated Boxing Machine as taught by Wilson, with a sensor as taught by Franey, since such a modification would provide the Automated Boxing Machine with a sensor for the detection of the timing and strength of a punch.

Response to Arguments

Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

However, in response to applicant's arguments that claims 3-5, and 16-19 are not combinable, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Allowable Subject Matter


Claim 2 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arun S. Chhabra whose telephone number is 571-272-7330. The examiner can normally be reached on M-F 9:30-6.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Huson can be reached on 571-272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


(JACKIE) TAN-UYEN HC
PRIMARY EXAMINER

1/22/07